Psychiatric Aspects of a Pediatric Intensive Care Unit

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Although there is a growing body of literature about the medical problems which arise in a pediatric intensive care unit (PICU), rather little has been written about psychiatric issues characteristic of the critical care setting for children. This article will describe the PICU as a community made up of several sub-groups, the various psychosocial stresses, the reactions to stresses, and the interventions appropriate for the PICU and each of its sub-groups.

Although there is a burgeoning literature about the medical problems which arise in a pediatric intensive care unit (PICU), rather little has been written about psychiatric issues characteristic of the critical care setting for children. May [1] wrote one of the first and only comprehensive articles about the psychiatric issues in the PICU. He described many of the problems which individuals, both staff and patients, face in this setting. Subsequent to that article, there have been a number of papers with much narrower foci which deal with such specific issues as staff attitudes [2], stress on nurses, physicians' reactions to training [3], group meetings [4], and the use of therapeutic play [5].

From a rather different perspective, Koumans [6] emphasized the importance of viewing an ICU as a "community" with special strengths and weaknesses, which were distinct from the strengths and weaknesses of the individuals who comprised it. He embraced the concept that the leverage point for the psychiatrist in the ICU should not be so much the individual patient as the various caregiving persons in the ICU community, to whom he should act as a mental health consultant. Direct interaction with patients should be less his concern than indirect intervention, and his orientation should be shifted from treatment to prevention. In addition, intervention should occur simultaneously with staff, patients, and family sub-units of the PICU community.

Needless to say, both the PICU community-oriented and individual problem approaches are important ways in which to understand and ameliorate psychosocial problems in the PICU. This paper will describe the PICU as a community comprised of several sub-groups, including the staff, the patients, their families, and the physical setting of the PICU, the various stresses, reactions to stress, and interventions for the entire PICU community and each of its sub-groups. These sub-groups are really sub-communities themselves, with their own histories and patterns of interactions. Figure 1 illustrates a *partial* listing of the subgroups. Of course, the real-life complexity of the interactions of all of these people cannot be appreciated by this list.

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I. *Staff*
   A. Nurses
      Head nurse
      Staff nurses
      Other nursing personnel

   B. Physicians
      Attending
      House staff
      Consultants, including psychiatrist

   C. Support Personnel
      Respiratory therapist
      Social worker
      Physical therapist
      Child life specialist
      Chaplain
      Volunteers
      Ward secretary (clerk)
      Janitorial services

II. *Patients*
   A. Acute—short term/chronic—long term
   B. Good prognosis/bad prognosis
   C. Sudden onset/gradual onset
   D. Cooperative/uncooperative

III. *Families*
   A. Parents
      cooperative/uncooperative
      realistic/unrealistic
      disturbed/disturbing
   B. Siblings
   C. Other relatives

IV. *Physical Setting*
   A. "Floor"—open beds (ward)
                isolation rooms (private)
   B. Nurses' station
   C. Conference room
   D. Waiting room
   E. Machines

FIG. 1. Communities of the Pediatric Intensive Care Unit (PICU).

STRESSES AND PROBLEMS

If the consultant approaches the PICU as a community, he/she evaluates problems with a mental image of Fig. 1. One looks for pathogenic stresses in the whole community, as well as in each of the sub-unit communities and in interactional transactions within and among the sub-units. Koumans [6] defined the two major ICU community stresses as the extraordinary intensity of emotion inherent in most interpersonal interactions and the rapid turnover in population of each one of the sub-groups.

The source of emotional intensity is the constant exposure to death, disfigure-

ment, loss, and dehumanization. The magnitude of these terrible experiences can be compared only to the results of active warfare. The feelings which these issues stir up are among the most powerful faced by mankind. The pressure and impact on the staff is usually directly proportional to the amount of direct patient contact. Therefore, nursing personnel have more than physicians, and house staff have more than attending staff. Common responses to these stresses are withdrawal of emotional attachment to patients, inappropriate denial of feelings and behavior, and overt depression and impaired clinical judgment. Somewhat more masked responses include intra-staff conflict and excessive need for a therapeutic/diagnostic certainty.

The rapid turnover of the population of the sub-units is so obvious and pervasive that most people in the community take rapid flux of people for granted. The corrosive effect of this rapid turnover is that it inhibits the establishment of close, trusting relationships. Most patients are discharged or dead in four weeks. Most of the house staff and many attending physicians also leave the PICU within a month. Most of the nursing staff stay longer, but they are on rotating shift assignments which effectively separate them from their colleagues. When periods of especially disheartening clinical experience, such as multiple deaths, coincide with times of maximum staff turnover, as when house staff and attending staff change, all of the individuals in the community are at high risk for maladaptive stress reactions.

The stresses of emotional intensity and rapid turnover do not operate independently. They are synergistic in their pathogenic effect. The emotional intensity of interpersonal interactions can be successfully managed only by the existence of close, trusting relationships, but the rapid turnover of the community population makes the establishment of these relationships rather difficult. Rapid turnover of the people in the PICU creates further loss. A common response people have to the pain of repetitive loss is to protect themselves by avoiding new attachments. This protective maneuver is frequently done by dehumanizing the people around him/her so that attachment becomes of little value. This process of loss and dehumanization in turn erodes the community resistance to despair and anomie.

In addition to these community-wide stresses, each one of the sub-units has its own special problems. Staff stresses have been well discussed and enumerated in the literature [2,3,6–13].

Hay and Oken [10] indicated that one of the sources of nurse/doctor conflict centers around the fact that doctors have more power but less direct patient care responsibility. Therefore, the doctors can withdraw when the patient dies and leave the full burden of supporting the family to the nurses. Conversely, compensatory over-zealousness may occur, and unnecessary heroic gestures may be made to save someone beyond recovery. A terminal patient on "q 15 minute" vital signs may have nothing done — and correctly so — when these signs deteriorate, or the physician will recognize the inappropriateness of frequent monitoring, and yet the same physician will insist on fruitless emergency attempts at resuscitation when death supervenes. This is not only increases the nurse's work load but adds to her frustration by diverting her energies from patients who could be helped.

Eisendrath and Dunkel [9] described the intra-staff conflict in terms of a family metaphor. They likened the head nurse to the "mother," the medical director to the "father," and the nursing and house staff to "children." In this model they felt that conflict between the head nurse and other staff nurses represented a playing out of the real family experiences of the staff. They emphasized need for the head nurse to be a nurturing but not overly permissive mother, who could provide control without being critical.

Conflict between the medical staff is relatively frequent but has not been described much in the literature. One frequent source of tension is between the PICU medical staff and "outside" services which manage cases in the PICU. This tension can be manifested by conflict resulting from confusion over who is in charge and the motives of that person.

> A young child with extensive second- and third-degree burns was admitted to the ICU. The prognosis was grim, indeed, and the child required constant and heroic medical management. Unfortunately, the responsibility for the child's medical care was split between the plastic surgeon attending and the PICU attending. The nurses and house staff complained bitterly that the plastic surgeons visited the PICU only once a day to write orders and then were unavailable. They felt that the plastic surgeons did not understand the complexities of comprehensive intensive care management, but they felt helpless to change the course of treatment. After the child's condition stabilized, the staff raised the issue of transferring the child to another medical center several hundred miles away which specialized in the treatment of burned children and which provided free medical care. The staff encouraged the parents to ask the plastic surgeon about this transfer, but they did not discuss their feelings or treatment ideas as a staff with the surgeon. One nurse reported hearing the plastic surgeon saying that "if the child made it, it would be the worst burn case ever successfully treated at this hospital." This quotation was rapidly circulated among the staff. All of the anger and feelings of helplessness crystallized into the firmly held belief that the plastic surgeons refused to transfer the child to a place of perceived certain safety simply because they wanted this child to increase their clinical experience.

This clinical example touches upon another commonly described problem, that of the feeling of inadequacy and helplessness in the face of insuperable problems [3,9–11,13]. In this case, some of these feelings were transformed into the belief that the plastic surgeons, not the overwhelming burns, were the child's major problem. The sense of inadequacy of the PICU staff also accentuated the idea that a medical center many miles away could cure this terrible problem that was beyond the skill and experience of their unit.

Repetitive exposure to death and dying is both a fact of life and a constant stress to the PICU staff [8,10,11,13]. Especially dramatic deaths or a series of deaths may serve as a focus to make the staff feel overwhelmed. These dramatic circumstances may cause the staff to connect many past deaths which they had forgotten.

> Unfortunately, the burned child's condition deteriorated so that transfer became impossible. The staff became more demoralized and angry at the plastic surgeons than before, and the plastic surgeons became even less available. The child had a cardiorespiratory arrest, and the PICU simultaneously called the plastic surgeons and began resuscitation. The attending surgeon assumed that the child had died and so brought the family into the PICU to see their deceased child. When the family arrived, the PICU staff was still in the process of an exceedingly vigorous and invasive resuscitation attempt on the child, whom they considered still to be alive. In the process of this resuscitation attempt, the child ruptured her pulmonary artery and covered several of the staff with blood. For many days after the death the

staff was overwhelmed with anger and grief. They remembered and discussed many other, much more "routine" deaths.

Todres et al. [3] list fatigue as a major stress among house staff. Fatigue diminishes efficiency of decision-making processes and thus makes the staff feel less competent. Fatigue also interferes with adaptive coping skills so that the impact of dealing with repetitive death and disfigurement is much more difficult. Indeed, all of the stresses, including intra-group conflict, repetitive facing of death, feelings of inadequacy, and fatigue all work together to interfere with the teamwork essential to deal with these very stresses. The previous child case illustrates how the stresses destroyed the teamwork and how the resultant lack of teamwork made the stresses worse.

Stresses peculiar to patients also have been described in the literature. The most prominent ones are the physical/psychological impact of the illness [1,12], separation from the family [1,12], pain [1], and inability to communicate.

McBride and Sack [14] have focused on these last three stresses or needs as being the cardinal ones for children in the PICU. Separation from family is perhaps the most important stress because it occurs precisely at the time that the child is most physically and psychologically regressed. The lack of contact with family members thus creates secondary problems because it exacerbates the impact of the other stresses. Pain or stress, itself, further increases the need for a mothering figure to assuage the hurt. The inability to communicate, either to express thought or feeling or to understand explanations of what is happening, again further emphasizes the child's aloneness. A child thinks, "If only Mommy were here, she would know how to help me, how to stop the pain, and how to tell me what is wrong."

In a similar manner, families have their own common stresses. Parents are threatened with the loss of life or health of their child [15]. Frequently, this threatened loss is of sudden onset, with no warning or explanation. The parents are helpless in terms of the care and improvement of their child [4,16]. They get little feedback from their child secondary to coma, machinery, and dehumanization from lack of privacy and invasive procedures [17]. The incomprehensibility of the PICU setting of unfamiliar machines, language, and personnel augments their isolation from the staff [1,18]. Families who lack fluency in English are especially handicapped. Molter [18] described four other stresses which relatives of patients in an adult ICU perceived as important. They were *(1)* not able to talk to the doctor at least once a day, *(2)* not told about chaplain services, *(3)* did not have a place to be alone while in the hospital, and *(4)* did not have someone to help with financial problems.

A common response to these stresses is identification with other parents of children in the PICU. The waiting-room group dynamics can produce their own stresses and tensions, which augment the other communication problems. Frequently, parents will compare their child's disease or treatment with other parents in the waiting room. This phenomenon becomes important particularly when there are several children in the PICU at the same time with the same illness. Sometimes the process of comparison can take on a quality of competition, the wish that "their child will do better than the other child." Sometimes this wish can be reversed or distorted by magical thinking so that a parent may hope that the other child will do badly, so that their child will do well. This process can turn the potentially supportive group spirit of the waiting room into a tension-filled, guilt-laden environment.

Almost nothing has been written about the stresses on other family members,

especially siblings. The most common issues which arise are the disruption of the family structure and the loss of the parents due to their preoccupation with the sick child. Rothstein [17] noted that siblings have fears that they, too, may become ill or might have played some role in the illness of their brother or sister. They also are worried about whether their brother or sister is going to die. Just as communication of both an understanding of the illness and expresssion of concern is hard for the patient, in a similar manner it is hard for the siblings. Sometimes siblings may share this information more eloquently through drawings.

> An 11-year-old boy was admitted with Reye's syndrome. He had a prolonged course with severe intracranial hypertension. During his three weeks in the ICU, his 10-year-old sister visited several times and made several drawings of her brother. In these drawings, equipment is faithfully reproduced and monitors and hyperalimentation fluids well drawn. Captions included, such as "He recognized me!" and "He is stronger than I thought." However, prior to his discharge from the unit, her drawings of her brother were reduced in size dramatically compared to those of her, whom she also included in the drawings. On the day of discharge from the ICU, her drawing of her brother suddenly increased in size to a true representation of his size as compared to hers. As he was restored to health, and her anxieties about him decreased, she was able to restore him to normal size.

The physical setting of the PICU adds enormous stresses to the entire community. The noise, the ubiquity of machines, the lack of privacy, the sterility, and the lack of natural diurnal cues are important factors. Several authors [14,16] emphasize the importance in ameliorating these stresses by providing windows and diurnal rhythms, warm and comfortable "retreat" areas for staff and families, and patient care areas which maximize privacy without causing isolation.

REACTIONS TO STRESSES

Just as the various stresses encountered in the PICU community can be divided into various sub-units, so can reaction to these stresses. There are two general principles which apply to the reactions to stress in all of the sub-units. First, recent and past experience with conflict, crises, and loss have a powerful effect of augmenting or diminishing a reaction. A parent who has had important losses is much more vulnerable to disorganization in response to the child's PICU hospitalization. A staff which has had past conflict with a certain "outside" attending physician is much more likely to be ready to fight again when he admits a patient. A staff which experiences nearly miraculous success with a particular type of patient will be more likely to be optimistic when a similar patient comes to the PICU. In fact, the PICU develops a whole mythology which powerfully determines reactions to stress.

> S.B. was a 15-year-old girl with vasculitis of unknown etiology, encephalopathy, ascites, left hemiparesis, pleural effusions, and renal failure. The staff perceived the mother as a major problem. She was openly angry with the staff because she felt they had given up. Indeed, the staff was very pessimistic and conveyed their pessimism to the mother. The staff belittled the mother's belief in healing by prayer and was upset because she focused on "silly details," such as S.B.'s fingernails, weight, and grooming. The staff felt that the mother was using inappropriate denial to avoid facing her

daughter's certain death. A staff meeting was held to respond to this crisis. After the staff had expressed their feelings of anger at the mother and their feelings of helplessness in the face of S.B.'s terrible illness, they chose one staff member to be a "primary communicator" with the mother so that medical information and planning was clarified. The mother was encouraged to talk of her faith and was involved more in nursing care decisions. The mother became less hostile and more appreciative of the staff. Simultaneously and unexpectedly, S.B. got better and was discharged from PICU. Her case became part of the PICU history about the danger of giving up.

A second general reaction to stress is the partitioning of the reaction into specific developmental sequence. This sequence has a beginning, middle, and end. Each new patient represents a new stress. Each sub-unit of the community responds with initial shock and denial to the impact of this stress. The middle period involves battling the illness and searching for meaning, understanding, and control of the problem. The end includes elation or mourning, success or defeat, and perhaps a working through of the trauma and its outcome [9,11,17,19]. A lack of synchrony among sub-units of the community or a lack of appreciation for the developmental aspect of reactions leads to many communication problems. These communication problems in turn exacerbate the crisis and impede the healthy unfolding of the developmental response to the crisis.

Waller, Tordres, Cassem, and Anderten [19] described an example of the consequences of the lack of appreciation by one sub-group of another sub-group's developmental stage of stress reaction. They reported that when the intensive care pediatrician prophesized a terrible prognosis, the parent responded with denial and hostility. The more the physicians attempted to inform the parents of the "reality" of their child's plight, the more stubborn became the parents' denial. These authors described how the parents' response was not "crazy" but was influenced by the doctors' use of "hanging the crepe" as their own emotional response to the crisis of death. Thus, the doctors' lack of recognition of their own develomental response and its impact on the parents led them to polarize the situation ("The parents are crazy or inappropriate") and therefore perpetuate the pathological response.

Perhaps the most troublesome and frequent pathologic response to stress involves a vicious cycle which starts with emotional polarization and inconsistent communication among the staff. This lack of teamwork causes inconsistent communication between the staff and the parents. This lack of consistency leads to parental regression, hostility, and distortion, which in turn reinforce emotional polarization of the staff [1,11,17,20] and/or scapegoating [8].

> T.W. was a six-year-old second-generation Italian-American, who was admitted with fulminant meningcoccemia. T.W.'s mother had called her pediatrician the day before because she had a fever of 102. Since she had no localizing signs or symptoms, the pediatrician assumed she had a viral upper respiratory illness and told the mother to start antipyretics. He admonished her to call him if any serious change occurred. At 3:00 A.M., T.W. developed purpura. The pediatrician had the family rush T.W. to the emergency room for admission. During the first several days of her hospital course she was comatose. Both the staff and the family were in the first stage of response—initial shock. To everyone's surprise and delight, T.W.'s general condition began to improve. However, she developed a septic embolus to her

right forearm which obviously was not going to resolve. While she was still comatose, the staff became concerned about how they would explain the proposed amputation of her right forearm to T.W. when she regained consciousness. The PICU staff called in a vascular surgeon to assess the timing and extent of the amputation. The surgeon took an optimistic approach and told the parents that the amputation would occur at the wrist. The private pediatrician, who never talked with the surgeon or with the PICU staff, felt that he needed to "protect" the parents from false hopes. He advised them that the amputation would surely involve the elbow joint. At this point the PICU staff became upset and angry at the parents' puzzling behavior. The father spoke little English and so was left out of most communications, even though he made all of the major decisions in the family. The mother was very religious and felt certain that God would answer her prayers to make her daughter well and whole again. In addition, she confided to the nurses that she felt T.W. had caught her illness from her father as a result of his "unsanitary habits" of spitting and blowing his nose into tissues and handkerchiefs of which he did not dispose. The staff cited this as one more example of the mother's "crazy behavior."

Several weeks later the private pediatrician has all of the family members cultured for meningcoccus and the father was indeed found to have the same strain as the daughter. Although he informed the staff about the results of the culture, he did not inform the family. Instead he treated them all with antibiotics to cure the carrier state. By this time T.W. was no longer comatose, and she still had not had her hand amputated. No one, including the PICU staff and her parents, ever told her that her hand was damaged, although it obviously was non-functional. The parents were angry and confused about the discrepant messages, and T.W. was avoided by everyone. Finally, the child psychiatrist induced the private pediatrician to talk with the vascular surgeon for the first time. They then both talked with the parents, who were able to face then the reality of their daughter's amputation. They discussed the issue with T.W. for the first time. The staff felt that the parents were much more realistic and approachable. Even the father began to understand more English!

As a discrete sub-community, the staff has its own three-part developmental response to the crisis of a critially ill child. The first stage is related to the shock of the impact of the tragedy. Factors such as recent previous experience with similar patients, current work load of the PICU, and administrative leadership all influence the nature of this stage. The second stage involves the battle of medical management, the tendency of the child to get lost in the machines. The PICU staff begins to grapple actively with feelings about helplessness/omnipotence. Eisendrath and Dunkel [9] felt that in the ICU these two poles of the helpless/omnipotent spectrum are well delineated. The patient represents the helpless and dependent; the staff represents the omnipotent and independent. The greater the staff member's need to feel omnipotent, the more vulnerable he/she is to disappointment as reality repeatedly proves human imperfection. This need to feel omnipotent, however, also may be helpful in that without such motivation some patients might be abandoned too easily. Indeed, the staff's idea of omnipotence may be very adaptive; in the face of some medical catastrophes, a heightened sense of helplessness might ensue.

Without being able to utilize some omnipotent ideas, the sense of helplessness might prove overwhelming and preclude any effective staff functioning.

The timing of the transition into the third phase of discharge or death is crucially related to the helpless/omnipotent dichotomy. Premature acceptance of helplessness may stimulate the inappropriate "hanging the crepe" phenomena described by Waller et al. [19] and illustrated by the case of S.B. Of even greater concern is the actual premature withdrawal of medical support. Eisendrath and Dunkel [9] describe the development of group pessimism — essentially depression on a group level. After a series of deaths, the staff may begin to feel fatalistic, hopeless, and apathetic. They will defend against repeated pain of loss by withdrawing emotionally from patients in their care, as well as from other staff members. This attitude may become contagious within a closely knit unit. Patients with marginal chances for survival may be viewed as beyond help. Unless this phenomenon is recognized, the predictions of failure may become self-fulfilling.

Rothstein [17] has described the three-part sequence for families. First, they respond with shock and disbelief. They are stunned by their sense of helplessness to prevent the illness, as well as to affect its outcome. Their helplessness usually leads to guilt since the societal expectations of parents are that they will protect their children from harm. The second stage is characterized by anticipatory waiting, questioning various staff members and other parents for hints of good news. This search for information is further reinforced by the need to do something active to diminish their sense of helplessness. One dramatic manifestation of this process is the preoccupation with the technological jargon and data. Within 24 hours of their child's admission, parents may be inquiring about and discussing the meaning of laboratory values of which they previously had never heard. The third phase is the elation or mourning when the outcome is clear. Sometimes the elation of a good outcome and PICU discharge is tempered by the anxiety engendered by going to a new medical setting with much less intensive care. Needless to say, the family's response does not end when the child leaves the PICU. In fact, the PICU admission is just the very small beginning to a much longer traumatic experience even when there is a good outcome [17,21,22].

As Rothstein described, when a previously healthy child dies in the PICU, mourning is often preceded by and later accompanied by anger. Faced with the "meaningless" death of their child, some parents react with rage. This rage may be directed toward the referring physicians for what is perceived to be poor care prior to referral to the PICU or toward the staff in the PICU. The period of mourning may last for many months and is an extremely difficult time for parents. Exacerbation of the mourning may occur at times of special meaning to the families, such as birthdays, holidays, anniversary of the original illness, admission to the PICU, or death.

The overt responses of the patient in the PICU are surprisingly mild [17], perhaps because of the relative brevity of most admissions [1], the lowered level of consciousness, and the relative comfort with which many children can tolerate regression. Although many children have fluctuating degrees of delirium, the condition is seldom diagnosed as such [1]. Many children experience a sense of security in the PICU as a result of the intensive medical care and respond to news of discharge with anxiety rather than relief [1]. For those children who have longer-term PICU admissions with relatively unimpaired sensorium, a typical tripartite sequence has been described [14,22]. This includes regression, followed by depression with projection and hostility, followed in turn by working through and/or death. McBride and Sack [14]

have reported that the child's emotional response to the illness is directly related to the parents' reaction to their child's illness.

> G.C. was a six-year-old boy who came to the PICU following cardiac surgery for treatment of complex congenital heart disease. Within two days of his admission to the PICU, two other post-operative cardiac boy patients in the beds near his arrested and died. During the resuscitation attempts, all of the staff left his bed and focused a tremendous resuscitation attempt on the dying boys. G.C. developed gastrointestinal bleeding from stress ulcers shortly thereafter. The next day he became very withdrawn, angry and depressed. The PICU staff and his parents tried to cheer him up, but no one allowed him to talk about his fears or ask for a meaningful explanation of the unsuccessful resuscitation efforts. The child psychiatrist helped the staff work with the child. In addition, the psychiatrist spent considerable time with the parents suggesting ways they could approach this horrible experience with their child. At first, they were resistant, but later they came to realize how helpful they could be by giving their child permission to talk about and draw the experience.

INTERVENTIONS

The interventions to psychosocial problems in the PICU community should be conceived of and enacted in the context of the systems theory approach, as well as individual psychotherapeutic concepts. There are a number of staff interventions which have a dramatic impact on the patients and their families and are therefore community interventions. For example, many authors [4,8,14,17,19,23] have suggested the necessity of regular staff meetings with a group facilitator. These staff meetings help work through the intense emotion inherent in the PICU, diminish staff polarization and communication inconsistencies, increase the speed with which a new staff member becomes a part of the community, diminish sense of incompetence, guilt, and inadequacy [8], and prevent entrenchment of role stereotypes of various staff sub-groups [2]. Ideally, the group facilitator should be a physician with training in pediatrics and child psychiatry. This background will provide him/her with the credentials and the knowledge to be accepted by the staff and to be empathetic with them. He/she should make frequent and regular rounds on the PICU so that he is available when he is needed most and not just at the scheduled time of day. The group facilitator should help the meeting identify special staff stresses and clarify where the staff is in their developmental response. For example, the meeting should help clarify whether the staff is overwhelmed by a sudden influx of severely ill children, working feverishly to prevent the deaths of several children with similar problems, or depressed and defeated from several recent deaths. The facilitator should be aware of community "myths" based upon recent or distant past experiences which inappropriately influence current behavior and mood state.

A second staff intervention is the appointment of a strong and permanent medical director who is the clear administrative head of the PICU. The medical director should work closely with a permanent head nurse in solving both administrative details and providing clear leadership. This type of hierarchical framework helps diminish the impact of rapid population changes. In addition, the medical director and head nurse provide the staff leadership necessary for dealing with the ever-present life and death crises of the PICU.

The third staff intervention is the development of a coherent and cohesive team approach [2,12,17]. The team should include the medical director or attending, the head nurse, primary nurse, the house staff and other nursing staff, the social worker, child psychiatrist, and child life specialist. The team has several goals which it must accomplish. It must acknowledge and resolve the conflict between the concept of teamwork and the hierarchical authority [12]. It should develop a clear protocol for medical management which must be worked out in the team and not by open disagreement on the floor of the PICU, engaging the parents to take sides, or by argumentative notes in the chart [17]. The team should develop a protocol for communication with the parents, including selection of a primary "communicator." This communicator should have direct medical involvement with the patient and should be very available to the parents and the patient. Patient and parental questions should be courteously referred to this primary communicator. The team should address psychosocial, as well as medical, issues of each case, including visitation by relatives, limit setting for objectionable behavior, and coordination of ancillary services, such as chaplain and volunteers [14]. The social worker on the team should have an office in or near the PICU. He/she should meet virtually all parents who have children in the PICU for more than two days. He/she should provide information about physical and financial service and emotional support for the parents. He/she should alert other team members about special vulnerabilities and concerns which parents might have. In certain problem areas, such as child abuse, the social worker should take a leadership role in the evaluation and response to the clinical problem. The social worker should be available for supportive counseling to the parents and family after the child has been discharged or died.

The child life specialist has an important and unique position on the PICU team as one of the few people who interacts closely with the child patient in a non-medical way. He/she should evaluate the special needs and strengths of each child with whom he/she works and design a specific therapeutic play program. This program should facilitate an expression of feeling and ameliorate boredom.

The child psychiatrist has several roles on the team. He/she might be the group facilitator at weekly psychosocial meetings. He/she should be available to provide psychiatric evaluations of patients and their families. Typical consultation questions center on evaluation of psychosis, suicidal risk, behavioral problems, and depression. In conjunction with these evaluations, he/she might recommend various interventions, ranging from medication to individual psychotherapy. He/she should insure that his/her interventions are implemented. He/she should work closely with both the child life specialist and the social worker so that the problems of the child and the parents are addressed. Above all, the child psychiatrist should be available on a constant and regular basis (daily if possible) so that he/she can be on hand during a crisis; otherwise he/she will not become part of the team.

Intervention with the patient has been described by a number of authors [1,5,14,23]. McBride and Sack [14] suggest that the mothering figure be as available as possible and that transitional objects, such as pictures and teddy bears, be provided. In fact, these two interventions may be at least as important to the parents as to the child since they give the parents a sense of doing something. There should be a regular diurnal schedule which is as predictable as possible and with as little change in the nursing personnel as possible. Pain should be addressed and alleviated even for seemingly small procedures. A child life specialist should be enlisted as part of the team to provide a regular program of play and audiovisual stimulation (e.g., TV,

radio, tape recorder, music). The treatment team should devise a program for com-
munication with the child to help anticipate and understand his illness and the
iatrogenic trauma, as well as to express feelings. Since many children in a PICU are
unable to talk and may have fluctuating levels of consciousness, communication
may be less than ideal.

> M.R. was an eight-year-old boy admitted to the PICU with the diagnosis
> of Guillain-Barré syndrome. Although he could not talk, he communicated
> his feelings of anger and sadness by his facial expression. The child life
> specialist felt that the primary emotional issues were connected with separa-
> tion from home, a complete sense of helplessness, a nearly total inability to
> communicate verbally, and the overwhelming boredom of the PICU. The
> child life specialist learned to understand his mouthing of words. Since he en-
> joyed drawing, she used this medium to give him the experience of a sense of
> control and decision. She also used activity books, such as connect-the-dots-
> by-numbers with M.R. directing her. She read a series of special books which
> helped convey the sense that he was allowed to feel angry and sad, to wish to
> be at home in his own bed, and to play in the snow with his friends. In order
> to provide a more stimulating and child-centered environment, a Christmas
> tree was set up. Posters were hung to orient him to space and time—the holi-
> day seasons and winter. An Advent calendar was made up so that he could
> count the days until Christmas. In order to help him cope with an altered
> body image and to feel a connection with home, a camera was used as an im-
> portant medium. When he was first asked whether he wanted to have his pic-
> ture taken, he responded enthusiastically. In fact, he insisted that his newly
> inserted tracheostomy be clearly visible in the picture.

It should be strongly emphasized that any intervention with the child must be
preceded by the full consent and active involvement of the parents. This includes
what a child is to be told about the etiology and prognosis of his illness. Although
staff members may feel that parents have no right to have information withheld
from children, the solution should be to understand and, it is hoped, to change the
parental attitude, rather than to disregard or override their decision. Obviously, a
major exception to this admonition is when parents refuse to allow life-saving pro-
cedures, such as needed blood transfusions (e.g., Jehovah's Witnesses). In these
cases, the entire team should meet, preferably with the hospital lawyer, to decide
upon a reasonable course of action. The responsibility to override a parental request
should rest with the medical director alone.

Family interventions are frequently overlapping with patient interventions. Cer-
tainly, the impact of a successful intervention with the family can have direct
ameliorative effect on the patient. Parents should be informed as clearly, consis-
tently, and honestly as possible about their child's status and prognosis [1,16,17]. It
should be remembered that honest communication is not at all equivalent to the
most dire communication. The staff should believe firmly that secrets about prog-
nosis or iatrogenic problems are damaging and disturbing because they always are
communicated in some form. Therefore, secrets have no role in the pediatric inten-
sive care unit [17]. When talking with the parents, the primary communicator should
be available to listen, as well as to inform [11], and should be available to the parents
after the child has left the pediatric intensive care unit. The staff should recognize

that the parents may be able to discuss different subjects and feelings with different staff members. These different communications should be shared at team meetings so that the staff can see the parents as whole people with a complete array of feelings. The parents' helplessness should be minimized by attempts to involve them in patient care. Visitation should be available on a frequent basis. However, parents should be given permission to go home and not be chastised for their inability to visit. Repetition of questions by family members or clinging to "unrealistic hope" should not be met with strident attempts to break down the denial [19]. Parental anxiety and denial usually are exacerbated by staff inconsistency and unavailability. Therefore, the staff response to stubborn parental denial should be directed to increase staff consistency and availability and not to change the parents' belief by force of argument. Siblings should be allowed to visit after appropriate prior preparation and with debriefing by the physician in charge.

The pediatric intensive care unit can be viewed as a community with a series of special problems and processes inherent in its functioning. In turn, this community is made up of a series of sub-communities, each with a life of its own. A psychiatric understanding of the PICU must incorporate both a community approach as well as an individual orientation to psychosocial problems. Likewise, interventions must address community issues, as well as be tailor-made to individual needs.

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